

IN THE CLAIMS

For the convenience of the Examiner, all pending claims of the present Application are shown below whether or not an amendment has been made.

Please amend the claims as follows.

1. (Currently Amended) An in-office wireless code division multiple access, CDMA, communication system, comprising:

a local area network, LAN, having an ethernet communication back-bone;

a plurality of CDMA wireless base stations coupled to said ethernet communication back-bone;

a wireless internet server coupled to said ethernet communication back-bone;

a plurality of wireless communication devices coupled to said CDMA wireless base stations via said ethernet communication back-bone, wherein the CDMA wireless base stations are operable to negotiate a handoff of a connection with one of the wireless communication devices from a first CDMA wireless base station to a second CDMA wireless base station using the ethernet communication back-bone;

a communication gateway coupled to said ethernet communication back-bone; and

a router coupled to said ethernet communication back-bone to enable said communication devices to communicate to the internet.

2. (Currently Amended) The system as recited in Claim 1, wherein said wireless base station includes a plurality of CDMA wireless modem modules for providing a communication link to external wireless communication devices to the in-office wireless communication system.

3. (Currently Amended) The system of ~~claim~~ Claim 2, wherein said wireless base station further ~~includes a~~ includes an applications processing module for processing calls received and originated from said wireless base station.

4. (Currently Amended) The system of ~~claim~~ Claim 3, wherein said call processing module formats call signals received by said wireless base station into data packets adaptable for the ethernet communication back-bone.

5. (Currently Amended) The system of ~~claim~~ Claim 3, wherein said wireless base station further includes an inter-networking processing module for providing a communication channel between the internet and a wireless communication unit coupled to said ethernet communication back-bone.

6. (Original) The system of Claim 1, wherein said wireless internet server includes a wireless mobility module for managing mobile units within the system.

7. (Original) The system of Claim 1, wherein said wireless internet server provides real-time call processing.

8. (Currently Amended) The system of Claim 5, said wireless internet server includes an integrated base station controller module and a mobile switch controller module for managing calls between ~~communications~~ communication units within the system.

9. (Currently Amended) The system of ~~claim~~ Claim 1, wherein the wireless internet server includes ~~call-manger~~ a call manager processing module for managing calls received and calls originated from the in-office wireless communication system.

10. (Currently Amended) A wireless office communication solution system, comprising:

an ethernet communication pathway;

a plurality of wireless base stations coupled to said ethernet communication pathway to receive and originate wireless communication traffic over said communication pathway, wherein the wireless base stations are operable to negotiate a handoff of a connection with a wireless communication device from a first wireless base station to a second wireless base station using the ethernet communication pathway; and

a wireless internet server coupled to said communication pathway to receive and manage wireless communication traffic over said communication pathway.

a1 11. (Currently Amended) The system of Claim 10, further including a communication gateway coupled to said communication pathway for providing communication formatting logic for transmitting a wireless call generated in the wireless base station to a public switch telephone network system.

12. (Currently Amended) The system of ~~claim~~ Claim 10, wherein the wireless base station includes call selection modules for determining whether a call received or originated from the wireless base station is a voice call or a data call.

13. (Currently Amended) The system ~~for claim~~ of Claim 10, wherein the wireless base station includes a call processing module for formatting wireless calls received by the wireless base station into formats adaptable for transmission on the ethernet communication pathway.

14. (Currently Amended) The system of Claim 10, wherein the wireless base station further includes a communication interface for providing communication protocols to enable the wireless base station to communicate over the ethernet communication pathway.

15. (Currently Amended) The system of ~~claim~~ Claim 10, wherein the wireless base station further includes a plurality of inter-networking functional modules for providing a communication channel between the wireless base station and the internet.

16. (Currently Amended) The system of ~~claim~~ Claim 10, wherein the wireless internet server includes call manager modules for handling calls processed by the wireless base station for transmission over the ethernet communication pathway.

al 17. (Currently Amended) The system of ~~claim~~ Claim 16, wherein the wireless internet server further includes a communication interface module for providing communication protocol to allow the wireless internet server to communicate over the ethernet communication pathway.

18. (Currently Amended) A code division multiple access, CDMA, communication system having a plurality of integrated wireless base stations, WIBS, having an integrated base station controller and a mobile switch controller function, the WIBS comprising:

a plurality of CDMA modems coupled to modulate and demodulate radio signals provided to said WIBS by a mobile communication unit;

a call processing module coupled to receive and process calls by said WIBS;

a plurality of interworking function modules coupled to said call processing module to process voice and data calls received by said WIBS; and

a network interface unit coupled to said plurality of interworking function modules to format calls processed in said WIBS for delivery over an ethernet back-bone, wherein the CDMA modems are further operable to negotiate a handoff of a connection with the mobile communication unit from a first CDMA modem to a second CDMA modem using the ethernet back-bone.

19. (Currently Amended) The WIBS of ~~claim~~ Claim 18, wherein the call processing module includes call processing logic for processing calls received by the WIBS.

20. (Currently Amended) The ~~WIBS system~~ of ~~claim~~ Claim 19, wherein the call processing module further includes call selection and distribution logic for selecting and distributing calls to and from a mobile unit to the WIBS during a forward link and a reverse link.

21. (Currently Amended) The ~~WIBS system~~ of ~~claim~~ Claim 18, wherein the plurality of IWFs includes a call IWF for handling voice calls received by the WIBS.

22. (Currently Amended) The ~~WIBS system~~ of ~~claim~~ Claim 18, wherein the plurality of IWFs includes a data IWF for handling data ~~call~~ calls received by the WIBS.

23. (Currently Amended) The ~~WIBS~~ system of ~~claim~~ Claim 18, wherein the network interface module packetizes calls processed by the WIBS into data packets adaptable for transmission within an internet protocol transmission medium.

24. (Currently Amended) The ~~WIBS~~ system of ~~claim~~ Claim 20, wherein the call selection and distribution logic enables the WIBS to communicate with other ~~WIBS~~ WIBSs coupled to the communication system.

a | 25. (Currently Amended) The ~~WIBS~~ system of ~~claim~~ Claim 18, wherein the plurality of modems receive CDMA data.

26. (Currently Amended) A wireless office communication solution system, comprising:

an ethernet communication pathway;

a plurality of wireless base stations coupled to said ethernet communication pathway to receive and originate wireless communication traffic over said communication pathway, wherein the wireless base stations are operable to negotiate a handoff of a connection with a wireless communication device from a first wireless base station to a second wireless base station using the ethernet communication pathway;

a wireless internet server coupled to said communication pathway to receive and manage wireless communication traffic over said communication pathway; and

a plurality of repeaters coupled to said ethernet communication pathway.

27. (Currently Amended) The system of Claim 26, further including a communication gateway coupled to said communication pathway for providing communication formatting logic for transmitting wireless ~~call~~ calls generated in the wireless base station to a public switch telephone network system.

28. (Currently Amended) The system of ~~claim~~ Claim 26, wherein the wireless base station includes call selection modules for determining whether a call received or originated from the wireless base station is a voice call or a data call.

29. (Currently Amended) The system of ~~claim~~ Claim 26, wherein the wireless base station includes a call processing module for formatting wireless calls received by the wireless base station into formats adaptable for transmission on the ethernet communication pathway.

30. (Original) The system of Claim 26, wherein the plurality of repeaters provides a wider horizontal and vertical wireless in-building aerial coverage.

31. (New) A method for communicating with wireless devices, comprising:
initiating a communication session between a wireless communication device and a first wireless base station coupled to an ethernet communication pathway;
negotiating a handoff of the communication session from the first wireless base station to a second wireless base station using the ethernet communication pathway; and
handing off the communication session from the first wireless base station to the second wireless base station.

32. (New) The method of Claim 31, wherein the wireless communication device communicates wirelessly using code division multiplex access (CDMA).

21 33. (New) The method of Claim 31, further comprising:
providing the wireless communication device with access to the Internet using an inter-networking device coupled to the ethernet communication pathway; and
maintaining the Internet access during the handoff of the communication session.

34. (New) The method of Claim 31, further comprising providing the wireless communication device with access to the public switched telephone network.

35. (New) The method of Claim 31, wherein:
the method further comprises repeating signals from the wireless communication device to increase the range of the wireless base station; and
the handoff is negotiated based on the increased range of the wireless base stations when the signals from the wireless communication device are being repeated.

36. (New) Logic embodied in a computer readable medium operable to perform the steps of:

initiating a communication session between a wireless communication device and a first wireless base station coupled to an ethernet communication pathway;

negotiating a handoff of the communication session from the first wireless base station to a second wireless base station using the ethernet communication pathway; and

handing off the communication session from the first wireless base station to the second wireless base station.

a | 37. (New) The logic of Claim 36, wherein the wireless communication device communicates wirelessly using code division multiplex access (CDMA).

38. (New) The logic of Claim 36, further operable to perform the step of:
providing the wireless communication device with access to the Internet using an inter-networking device coupled to the ethernet communication pathway; and
maintaining the Internet access during the handoff of the communication session.

39. (New) The logic of Claim 36, further operable to perform the step of providing the wireless communication device with access to the public switched telephone network.

40. (New) The logic of Claim 36, wherein:
the logic is further operable to perform the step of repeating signals from the wireless communication device to increase the range of the wireless base station; and
the handoff is negotiated based on the increased range of the wireless base stations when the signals from the wireless communication device are being repeated.

41. (New) A system, comprising:

means for initiating a communication session between a wireless communication device and a first wireless base station coupled to an ethernet communication pathway;

means for negotiating a handoff of the communication session from the first wireless base station to a second wireless base station using the ethernet communication pathway; and

means for handing off the communication session from the first wireless base station to the second wireless base station.
